GEOGRAPHY

Minor or Integrative Studies
Concentration only

Geography is an integrative discipline that focuses on the interrelationships between the physical and human environments.

Geographers investigate the physical landscape (e.g., landforms, climate, biosphere) and spatial patterns of human activity within the environment (e.g., urbanization, migration, spread of diseases, desertification, global change). By integrating the physical and the human environments, Geographers bring a unique perspective to the study of pressing societal problems and issues, such as natural disaster relief and urban sprawl. This perspective is strongly enhanced by a suite of spatial analytical tools (e.g., cartography, remote sensing, Geographic Information Systems). With its spatial analytical tools and broad perspectives on the physical and cultural world, geography provides useful skills and knowledge for students in a variety of fields from urban and land use planning to business, resource management, and international development.

Geographic knowledge and thinking enables one to understand the constantly changing places, people, patterns, and connections in the world today. There has never been a time of more mobility of people, information, and ideas, which makes understanding the spatial context of places and interactions very important.

A student must complete the following requirements for the minor or concentration in geography:

Minor Requirements
Prerequisites

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>GEOG/ENST</td>
<td>Weather and Climate</td>
<td>3</td>
</tr>
<tr>
<td>203</td>
<td>Landforms</td>
<td></td>
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<tr>
<td>GEOG/ENST</td>
<td>Cultural Geography</td>
<td>3</td>
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<tr>
<td>201</td>
<td>Geography of the United States</td>
<td></td>
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<tr>
<td>GEOG 205</td>
<td>World Regional Geography</td>
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<td>GEOG 206</td>
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Total Credit Hours 6

Required courses
12 credits from the following:

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<th>Code</th>
<th>Title</th>
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<tbody>
<tr>
<td>GEOG 302</td>
<td>Mapping Our World</td>
<td>3</td>
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Select nine credit hours from any of the following (CAGY):

Physical Geography courses:

- GEOG/ENST 320 Global Climate Change
- GEOG 350 Geomorphology
- GEOG 377 Field Methods
- ESCI 301 Environmental Science
- ESCI/GEOL 375 Groundwater Hydrology

Human Geography courses:

- ECON 483 Urban Economics
- GEOG/ENST 300/STS 308 Urban Geography
- GEOG/ENST 310/STS 309 Economic Geography
- HIST/STS 3695 American City
- POL/CRJ 323 Urban Politics

Regional Geography courses:

- GEOG 307 Geography of Western Europe
- GEOG/ENST 327 Michigan Geography

Geospatial Techniques courses:

- GEOG/ESCI/GEOL 305 Intro to GIS
- GEOL/ENST 340 Remote Sensing
- GEOL 440 Advanced GIS Applications

Other courses:

- GEOG 390 Topics in Geography
- GEOG 399 Independent Study

Total Credit Hours 12
GEOG 206  World Regional Geography  3 Credit Hours
World Regional Geography includes a systematic study of the world’s geographic realms and regions, including Europe, Russia, Australia-New Zealand, East Asia, South Asia, Southwest Asia, N Africa, Subsaharan Africa, Middle and South America. Geographic concepts, such as map reading and spatial analysis, are first introduced. Then, the world is classified into geographic realms and regions using both physical and social criteria. Each region results from a unique interaction between the human societies and the physical environment. The physical, cultural, political, economic and social features of each region are studied, along with any special regional concerns or problems.

GEOG 300  Urban Geography  3 Credit Hours
The geography of human settlement and urbanization. Particular emphasis is placed on human transformation of the physical environment, and resource use throughout history from ancient civilizations to modern megalopolises. Universal urban challenges such as sprawl, pollution, congestion, crime, poverty, etc., are addressed.

GEOG 302  Mapping Our World  3 Credit Hours
Mapping our World provides an introduction to geospatial techniques and the important roles spatial data play in today’s world. This course introduces the students to basic concepts of geographic information systems, remote sensing and cartography. A focus of the course is on map analysis and map design.

GEOG 305  Intro to GIS  4 Credit Hours
The basic elements of geographic information systems, map interpretation and map design. Principles and methods of spatial data collection, analysis, and display are introduced. (W)
Prerequisite(s): GEOG 302
Corequisite(s): GEOG 305L

GEOG 305D  Intro to GIS & Cartography Dis  0 Credit Hours
Required discussion session for GEOG 305.
Corequisite(s): GEOG 305

GEOG 307  Geography of Western Europe  3 Credit Hours
An analysis of the strengths, weaknesses, interrelationships, and interdependence of selected countries of this economically advanced region. (OC).

GEOG 310  Economic Geography  3 Credit Hours
Spatial aspects of the ways people make their living. Discussion of the spatial distribution of resources and wealth at various scales. Introduction of site selection and location analysis.

GEOG 315  Political Geography  3 Credit Hours
The spatial dimensions of political activity from the local to the global scale. Themes include: control of territory, relations among political entities, and political ideology.

GEOG 320  Global Climate Change  3 Credit Hours
This course explores concepts and current thinking on global climate change and environmental impacts. It covers the history of Earth’s climate, causes of climate change and current research attempting to forecast change. The biotic, economic, and social implications of climate change are discussed. (AY)
Prerequisite(s): GEOG 203 or ENST 203
Restriction(s):
Can enroll if Class is Freshman or Sophomore or Junior or Senior

GEOG 325  Global Cities  3 Credit Hours
The course focuses on comparing the urban form, economies, and social life in cities around the world. The societies of the westernized, developed world are already highly urbanized. Cities outside of this sphere are generally growing much faster and experiencing greater social and economic upheaval as a result. Understanding non-North American urbanization is a vital part of understanding cities in general. (F)

GEOG 327  Michigan Geography  3 Credit Hours
A geographic study of landforms, waterways, natural resources, landmarks and economic activities that contribute to the physical and cultural landscapes of Michigan. Population, industry, agriculture, recreation and tourism will all be considered. (S, W, YR)

GEOG 390  Topics in Geography  1 to 3 Credit Hours
Selected topics to be announced. (OC).

GEOG 390B  Topics in Geography  1 to 3 Credit Hours
TOPIC TITLE: Global Climate Change. This course explores concepts and current thinking on global climate change and environmental impacts. It covers the history of Earth’s climate, causes of climate change and current research attempting to forecast change. The biotic, economic, and social implications of climate change are discussed.

GEOG 399  Independent Study  1 to 3 Credit Hours
Readings or analytical assignments in accordance with the needs and interests of those enrolled and agreed upon by the student and the advising instructor.

* An asterisk denotes that a course may be taken concurrently.

Frequency of Offering
The following abbreviations are used to denote the frequency of offering:
(F) fall term; (W) winter term; (S) summer term; (F, W) fall and winter terms; (YR) once a year; (AY) alternating years; (OC) offered occasionally